

Original article

Factors associated with conflict and styles of conflict management among health professionals

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Summary

Introduction. Conflict is a process during which one person consciously and intentionally makes an effort to prevent the other person's efforts, some kind of blockade that will lead to interruption in achieving the goals and interests of the other person. Conflicts in the healthcare team are common and can lead to reduced productivity in the work of healthcare professionals, which can have a negative impact on the care and treatment of patients.

Methods. This cross-sectional study involved 100 health professionals, nurses and doctors employed in the primary, secondary and tertiary levels of health care. The research was conducted from March to August 2020. A questionnaire on socio-demographic characteristics of respondents, a questionnaire on conflicts of health professionals, and a standardized scale of depression, anxiety and stress with 21 questions (DASS-21) were used to measure the level of subjective depression, anxiety and stress

Results. Seventy-four health workers (74%) had experience of conflict in the workplace, doctors (95%) significantly more often than nurses (58%) (p=0.001). Forty percent of health workers stated that communication problems were the most common cause of conflict. Seventy-nine respondents (79%) chose cooperation and compromise as a style in conflict resolution. Doctors chose cooperation more often (84%) than nurses (74%) and the difference was statistically significant (p=0.048). Subjects who had experience of conflict had significantly higher average values of anxiety (8.01±2.12) (p=0.026) and stress (10.32±2.91) (p=0.008) compared to subjects who had no experience of conflict $(6.13\pm1.91; 6.12\pm2.03)$.

Conclusion. Doctors were significantly more likely to have conflict situations in the workplace. For conflict resolution doctors were more likely to choose a style of cooperation and compromise than nurses who were more likely to choose a style of conflict avoidance.

Keywords: conflict, conflict resolution, health professionals

Introduction

The notion of conflict depends on the way it is defined. One definition states that conflict is a situation that arises, develops and transforms into a disagreement between at least two people who have opposing views, access to a particular situation, and show interest in the same value [1]. According to author Steven Robbinson, conflict is a process during which one person

consciously and intentionally makes an effort to prevent another person's efforts, some form of blockade that will lead to interruption in achieving the other person's goals and interests [2]. As it can be seen, most definitions of conflict are similar, but what is common to each definition are three characteristics, and these are: the participation of at least two people is necessary for the conflict to arise, participants in the conflict can be individuals or groups, and that there are conflicting views between conflicting persons [3].

The existence of a cause is necessary for the conflict to arise. The root causes of conflict mainly stem from the definition of conflict. Linstead et al. [4] listed a large number of causes of conflict in work organizations, and most often they can be: the nature of work, different work goals, economic resources, roles of external groups, job satisfaction and different needs and desires of employees. Causes of conflict can also be lack of resources, interdependence in work, differences in the values of individuals or groups, personal style, communication problems, change of role in work, overlap in the organization of work and inadequate remuneration [5].

According to the definition of the World Health Organization (WHO), work in a health team should represent the cooperation of several medical experts in achieving a mutual goal, which is the provision of health care to patients and their treatment. Work in a health team must be well-coordinated by the health team leader [6]. In order for the organization in the health team to be of high quality and professional, it is necessary for each member of the health team to take responsibility for the part of the work he/she performs. This is the only way for the health team to achieve good results in patient care through coordinated action, because a larger number of members of the health team, compared to an individual, can achieve greater efficiency and scope of work, and the number of errors in this case is significantly lower [7]. However,

if conflicts in healthcare institutions occur among colleagues, in the relationship between nurses and doctors, but also between healthcare professionals and patients and relatives of patients, it can increase the number of errors in treating patients [8, 9].

The occurrence of conflict and its consequences in the health system is a global problem. However, there is not much data in the literature on the difference in frequency, attitudes and factors associated with conflict between nurses and physicians. That is why in our research we paid special attention to determine how frequent the conflicts are, and to determine the differences between nurses and doctors in the frequency of conflict, factors associated with conflict and conflict management among health professionals.

Methods

Study design

The research was conducted as cross-sectional study in the population of health professionals, medical doctors and nurses employed at the primary, secondary and tertiary level of health care, from March 2020 to August 2020. The sample consisted of health professionals from the "Health Center Sokolac" (primary level of health care), "Psychiatric Hospital Podromanija" (secondary level of health care) and the "Institute for Forensic Psychiatry Sokolac" (tertiary level of health care). The study included 100 subjects (50 nurses and 50 medical doctors) of both sexes, aged 20 to 65 years. Prior to the start of the research, the consents of the competent institutions were obtained, in writing. Participation in the study was voluntary, and the survey was anonymous.

Questionnaires

Data were collected by survey. To obtain the data, a questionnaire was used which was composed of questions for collecting socio-demographic data. The questionnaire on

health workers' conflicts were used to obtain data about the frequency and causes of conflict(s) among health professionals. The Depression Anxiety Stress Scale 21 (DASS-21) for healthcare professionals was used to assess psychological distress symptoms (depression, anxiety and stress) among health professionals. We used a short, translated into Serbian and tested version of DASS-21 questionnaire. The variables in the questionnaire were divided into three subscales: depression, anxiety, and stress. The depression scale is characterized by feelings of hopelessness, loss of self-esteem and motivation. The anxiety scale is based on high levels of physiological arousal, panic and fear. The third scale, the stress scale, is based on tension, anxiety, and inability to relax. The level of depression was examined by statements such as: "I feel that life has no meaning", anxiety: "My mouth is dry", and stress: "It was hard for me to calm down". Each scale was described using seven statements, and higher scores in each subscale denoted higher levels of depression, anxiety, and stress. The respondent's task was to indicate, on the Likert scale from 0 (did not apply to me at all) to 3 (almost entirely or most time applied to me), how much they experienced the above in the past week. The total score on the scales was expressed as the sum of the scores on each particle multiplied by two to be able to estimate the intensity of mental disorders. The larger overall score means that the person has greater psychopathological difficulties and more symptoms of depression, anxiety and stress. Each scale has its critical value and shows the presence of mental disorders if on the depressive subscale they have an overall score greater than 9, on the anxiety subscale the total score greater than 7 and on the stress subscale total score greater than 14. DASS-21 scores are classified as normal, mild, moderate, severe, and extremely severe (34). For the DASS-21 questionnaire no special permission is required for its use and it is publicly available.

Statistical analysis

The methods of descriptive and analytical statistics were used in the paper. Among the methods of descriptive statistics, measures of central tendency and measures of variability were used, namely: arithmetic mean with standard deviation and relative numbers for categorical variables. Among the methods of analytical statistics, Student's t test was used for bound samples. Of the nonparametric tests, the chi-square test was used to assess the difference between the groups. The usual value of p< 0.05 was taken as the level of statistical significance of differences, while the values of p< 0.01 were considered highly statistically significant. Results were statistically analyzed in GraphPad Prism software (GraphPad, La Jolla, CA, USA) and SPSS software package version 21.0 (Statistical Package for Social Sciences SPSS 21.0 Inc, USA).

Results

One hundred respondents participated in the research, of which 50% were nurses/technicians, while 50% were medical doctors. Of the total number of respondents, 63% were females and 37% were males. Statistical analysis showed that there was a high statistically significant difference between the groups of respondents divided by profession in relation to gender (p=0.002), with significantly more women (78%) in the group of nurses/technicians than in the group of doctors of medicine (48%). The average age of the subjects was 43.70 ± 11.89 years, the youngest was 20 and the oldest was 65 years old. Respondents were divided into two categories in relation to age, the category in range of 20–40 years (41%) and the category in range of 41–65 years (59%). Table 1 shows that 36% of nurses have completed only secondary education, while 14% of nurses have a university degree from nursing school, 24% of doctors have completed the Faculty of Medicine (medical doctor), while 26% of doctors have completed

Table 1. Differences in age, gender, level of health care, years of work experience and level of anxiety, stress and depression between nurses and doctors

Variables	Nurses (n=50)		Doctors (n=50)		Total (n=100)		P
	n	%	n	%	n	%	$ (\chi^2)$
Age							
20 to 40 years	24	48	17	34	41	41	0.155
41 to 65 years	26	52	33	66	59	59	
Gender							
Male	11	22	26	52	37	37	0.002
Female	39	78	24	48	63	63	
Education							
Secondary school	36	72	0	0	36	36	0.056
Faculty of medicine (nursing school)	14	28	0	0	14	14	
Faculty of medicine (MD)	0	0	24	48	24	24	
Specialty	0	0	26	52	26	26	
Level of health care							
Primary	17	34	19	38	36	36	0.917
Secondary	17	34	16	32	33	33	
Tertiary	16	32	15	30	31	31	
Years of work experience							
1 to 20 years	32	64	37	74	69	69	0.280
21 do 43 years	18	36	13	26	31	31	
Depression (DASS 21)							
Without depression	49	98	49	98	98	98	1.000
Moderate depresion	1	2	1	2	2	2	
Anxiety (DASS 21)							
Without anxiety	30	60	38	76	68	68	0.229
Mild anxiety	4	8	4	8	8	8	
Moderate anxiety	11	22	4	8	15	15	
Severe anxiety	5	10	4	8	9	9	
Stress (DASS 21)							
Without stress	17	34	32	64	49	49	0.012
Mild stress	5	10	4	8	9	9	
Moderate stress	18	36	6	12	24	24	
Severe stress	10	20	8	16	18	18	

DASS 21 = The Depression, Anxiety and Stress Scale - 21 Items; $\chi 2$ - Chi-square test

a specialization in a particular field of medicine. Sixty nine percent of respondents have a work experience of 1 to 20 years, while 31% of respondents have a work experience of 21 to 43 years. Thirty-six percent of respondents work in a health center, 33% in a psychiatric hospital, while the remaining 31% of respondents work in the Institute of Forensic Psychiatry. No significant difference between the groups of respondents divided by profession in relation to age, length of service and level of health care was observed. Of the total number of surveyed health professionals, anxiety was observed in 32%, while anxiety was not observed in the remaining 68% of respondents. Mild anxiety was observed in 8% of respondents, moderate in 15%, while severe anxiety was observed in 9% of health care workers surveyed. Measured by the DASS 21 questionnaire, it was found that stress was present in 51% of surveyed health workers, while stress was not present in the remaining 49% of respondents. Mild levels of stress were observed in 9% of respondents, moderate stress in 24%, while severe levels of stress were observed in 18% of surveyed health professionals. Moderate depression was observed in only 2% of respondents, while depression was not observed in the remaining 98% of surveyed health professionals. There was no statistically significant difference between the groups of surveyed health workers divided by profession in relation to the presence and level of anxiety and depression. However, it was observed that nurses and technicians had statistically significantly (p=0.012) more often severe levels of stress (20%), moderate levels of stress (36%) and mild stress (10%) compared to doctors of medicine (8%; 8% and 8%) (Table 1).

Of the total number of surveyed health professionals, the majority (74%) had a conflict at workplace until the moment of the survey, while the remaining 26% stated that so far there had been no conflict situations with a colleague, patient or relative of patients. The high statistically significant difference between nurses and doctors was observed (p=0.001). Doctors significantly more often (95%) stated that they had experienced conflict at workplace when compared to nurses (58%) (Figure 1).

There was no statistically significant difference between the groups of respondents divided by gender, age, level of healthcare, years of experience and factors associated with conflict (Table 2).

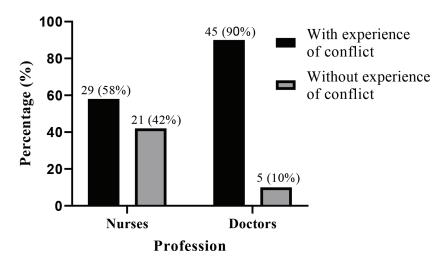


Figure 1. The presence of conflict in the workplace among nurses and doctors ($\chi 2$ =13.306; p=0.001); $\chi 2$ - Chi-square test

Table 2. Differences in age, gender, level of health care and years of work experience among health professionals divided by presence of conflict

Variables	-	Group with conflict (n=74)		Group without conflict (n=26)		
	n	%	n	%	(χ^2)	
Age						
20 to 40 years	28	37.8	13	50.0	0.278	
41 to 65 years	46	62.2	13	50.0		
Gender						
Male	31	41.9	6	23.1	0.087	
Female	43	58.1	20	76.9		
Level of health care						
Primary	30	40.5	6	23.1	0.176	
Secondary	21	28.4	12	46.2		
Tertiary	23	31.1	8	30.8		
Years of work experience						
1 to 20 years	52	70.3	17	65.4	0.643	
21 do 43 years	22	29.7	9	34.6		
Factors that most often lead to conflict						
Problems in organization	28	37.8	6	23.1	0.187	
Personal problems	16	21.6	10	38.5		
Problems in communication	30	40.5	10	38.5		

DASS 21 = The Depression, Anxiety and Stress Scale - 21 Items; $\chi 2$ - Chi-square test

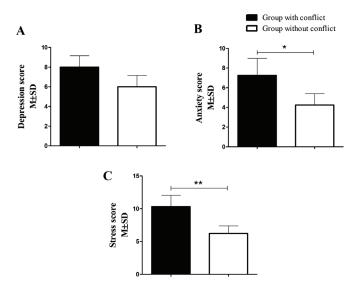


Figure 2. Mean values of depression (A), anxiety (B) and stress (C) measured by DASS 21 scale between groups of health professionals divided by presence of conflict until the time of survey. M = mean; SD = standard deviation; DASS 21 = The Depression, Anxiety and Stress Scale - 21 Items; Mann Whitney U test; *p< 0.05; **p< 0.010

Figure 2 shows that there was no significant difference in mean values of depression score among health professionals divided by presence of conflict prior to the time of survey. However, the mean score for anxiety was significantly higher (p=0.026) in a group of health professionals which had a conflict in their carriers (8.01±2.12) when compared to a group of health professionals without a conflict (6.13±1.91). Also, respondents with a presence of conflict had significantly higher (p=0.008) values of stress (10.32±2.91) when compared to a group without conflict in their carriers (6.12±2.03) (Figure 2).

Table 3 shows the frequency of factors leading to conflict in the health team. The largest number of surveyed health workers (40%) stated that it was the problem in communication, 34% of respondents stated that the main factor was the problem in the organization of work, while 26% of respondents stated that the main factor in conflict

Table 3. Differences in factors associated with conflict and conflict management between nurses and doctors

	Nurses (n=50)		Doctors (n=50)		Total (n=100)	
n	%	n	%	n	%	(χ^2)
16	32	18	36	34	34	0.897
13	26	13	26	26	26	
21	42	19	38	40	40	
2	4	2	4	4	4	0.048
37	74	42	84	79	79	
11	22	3	6	14	14	
0	0	3	6	3	3	
3	6	15	30	18	18	0.003
36	72	31	62	67	67	
11	22	4	8	15	15	
0	0	8	16	8	8	0.006
42	84	39	78	81	81	
8	16	3	6	11	11	
0	0	0	0	0	0	0.043
18	36	9	18	27	27	
32	64	41	82	73	73	
6	12	12	24	18	18	0.025
24	68	36	72	60	60	
10	20	2	4	12	12	
	16 13 21 2 37 11 0 3 36 11 0 42 8 0 18 32 6 24	16 32 13 26 21 42 2 4 37 74 11 22 0 0 3 6 36 72 11 22 0 0 42 84 8 16 0 0 18 36 32 64 6 12 24 68	16 32 18 13 26 13 21 42 19 2 4 2 37 74 42 11 22 3 0 0 3 3 6 15 36 72 31 11 22 4 0 0 8 42 84 39 8 16 3 0 0 0 18 36 9 32 64 41 6 12 12 24 68 36	16 32 18 36 13 26 13 26 21 42 19 38 2 4 2 4 37 74 42 84 11 22 3 6 0 0 3 6 36 72 31 62 11 22 4 8 0 0 8 16 42 84 39 78 8 16 3 6 0 0 0 0 18 36 9 18 32 64 41 82 6 12 12 24 24 68 36 72	16 32 18 36 34 13 26 13 26 26 21 42 19 38 40 2 4 2 4 4 37 74 42 84 79 11 22 3 6 14 0 0 3 6 3 3 6 15 30 18 36 72 31 62 67 11 22 4 8 15 0 0 8 16 8 42 84 39 78 81 8 16 3 6 11 0 0 0 0 0 18 36 9 18 27 32 64 41 82 73 6 12 12 24 18 24 68 36 72 60	16 32 18 36 34 34 13 26 13 26 26 26 21 42 19 38 40 40 2 4 2 4 4 4 37 74 42 84 79 79 11 22 3 6 14 14 0 0 3 6 3 3 3 6 15 30 18 18 36 72 31 62 67 67 11 22 4 8 15 15 0 0 8 16 8 8 42 84 39 78 81 81 8 16 3 6 11 11 0 0 0 0 0 0 18 36 9 18 27 27 32 64 41 82 73 73 6 <td< td=""></td<>

 $[\]chi^2$ - Chi-square test

in the health team was personal problems with colleagues. No statistically significant difference in the frequency of conflicts in the workplace in relation to age, level of health care, length of service and factors that most often lead to conflicts in health workers was observed. The largest number of respondents (79%) chose cooperation and compromise as a way of resolving conflict, 14% avoided conflict, 4% chose reconciliation as a style of conflict resolution, while 3% of respondents chose bidding as a style of conflict resolution. There was a statistically significant difference (p=0.048) in the ways of resolving conflicts between groups of respondents divided by profession. Doctors of medicine significantly more often (84%) chose cooperation and compromise as a style of conflict resolution compared to nurses and technicians (74%), while nurses and technicians significantly more often (22%) chose conflict avoidance as a style of conflict resolution compared to doctors of medicine (6%). Nurses and technicians (22%) highly statistically significantly (p=0.003) more often kept their opinion to themselves during the conflict compared to doctors of medicine (8%) and highly statistically significantly more often (16%) (p=0.006) adjusted to requirements of colleagues in comparison to doctors of medicine (6%). Doctors of medicine (82%) significantly more often (p=0.043) solved the problem by compromise in relation to nurses and technicians (64%), while nurses and technicians (20%) significantly (p=0.025) more often gave in to their colleagues during conflicts in relation to doctors of medicine (4%) (Table 3).

Discussion

Conflict in itself is not good or bad, however, the consequences of conflict can be bad or good, depending on the approach to the conflict. From the traditional aspect, the view of the conflict is completely negative, but from

the modern contemporary aspect, the conflict is seen as a normal and inevitable situation, so from such opposing views, two consequences of the conflict can be predicted, positive and negative [1]. Conflict in the healthcare team, also, always carries certain consequences that can be positive or negative. The positive aspects of conflict in the healthcare team are that it can improve the quality of decisions made, encourage creativity and innovation, increase interest and curiosity in the team, can become a mean of reducing tension, and enable better adaptation to change. The negative consequences of the conflict are dissatisfaction, weakening of mutual relations, reduced work performance and poor communication among team members. When conflict leads to a struggle among members, which becomes more important than doing the job, there is a danger of work failure and disintegration of the health team [10–12].

Our research was conducted on a sample of 100 health professionals (50% of nurses and 50% of medical doctors) and aimed to identify frequency of the conflicts, and to determine the differences between nurses and doctors in the frequency of the conflicts, factors associated with conflict and the most commonly chosen styles by health workers to overcome conflict. The observed population was mostly female (63%), aged 41 to 65 years (59%) in direct contact with patients in health care facilities of primary (36%), secondary (33%) or tertiary level (31%).

Conflicts are one of the basic social phenomena, which in traditional culture is considered a negative phenomenon and something that should be avoided. The health care system is a very complex system, because the outcome of treatment and care of patients depends on health care workers and their multidisciplinary work. Precisely because of the high level of interdependence in work, health teams are very prone to conflict situations [13]. The most important specifics of the nursing profession are hard, stressful

and highly humane work, which requires a high level of cooperation with the medical profession and patients, and the patient's life often depends on the timely intervention of nurses and technicians. Some of the stressors in the workplace, such as shift and overtime work, jobs that are risky for health, interpersonal conflicts, are constantly present in their workplaces and work environment, which could lead to exhaustion, fatigue, burnout and rise of conflict among health professionals and patients [5, 14]. In a study by Raknes et al. [15] conducted in Norway on a sample of 745 nurses and technicians it was found that 8.4% of nurses had previous conflicts in the workplace, while 3% during the study had a current conflict with the colleague in the workplace. At risk for various forms of conflict in the workplace are especially nurses and emergency technicians, as shown by the results of a study in Pennsylvania, which found that 36% of nurses working in the emergency service in the last 12 months had a conflict in the workplace, unlike 6% of nurses who worked in other wards [16]. In a study by Grieko et al. [17] made in Ireland, the percentage of conflict among health professionals is even higher and amounts to 48%. In a recent cross sectional study made in a General Hospital in Greece by Saridi et al. [18] from 200 of examined health professionals 59.5% reported at least one collision with the colleague, where nurses significantly more often (60%) would quit their job because of frequent conflicts when compared to doctors (7%). In our study, of the total number of surveyed health workers, the majority (74%) had the conflict at work by the time of the survey, while the remaining 26% stated that so far there had not been conflict situations with the colleague, patient or relative. Doctors significantly (p=0.001) more often (95%) stated that they experienced conflicts at workplace when compared to nurses (58%). However, there was no statistically significant difference among the groups of respondents divided by gender, age, level of healthcare, years of experience and factors associated with conflict. The reason of such higher prevalence of conflicts in our group of respondents might be because, majority of our respondents (64%) worked in psychiatric institutions. Numerous studies have documented that psychiatric staff are at high risk for verbal aggression, workplace violence, even physical assault by patients, visitors, coworkers or supervisors [19-21] and recent study by Kelly et al. [21] done in public mental hospital in California demonstrated that from 323 clinical care staff 69.5% had experienced physical assault in the previous 12 months and 73% of employees (nurses and doctors) had the conflict in their workplace. This is similar to prevalence of conflict in our respondents.

In the study by Krajnović et al. [22] conducted in Croatia on a sample of 1354 nurses and technicians it was found that 39% of nurses and technicians during their work experience had conflict situations in the health care team, 38.4% of nurses experienced humiliation by colleagues during their work, 38% experienced insults, while the opinions and attitudes of the surveyed health professionals were ignored in 28.1% of the respondents. The results of this study show that negative behaviors and conflicts in the workplace arise due to stressful working conditions, organizational problems, as well as communication problems [22]. Krajnović et al. [22] stated that 14.5% of respondents had conflict situations with a superior, 12.2% with colleagues, while 7.2% had the conflict with a subordinate due to their inappropriate behavior. In our study of the total number of surveyed health workers, 14% had conflicts with superiors, 31% with associates, 17% with subordinates, 12% with patients or relatives of patients, while 26% of surveyed health workers did not have conflicts at work.

Communication in the field of health care is of great importance because the way of communication of health workers impacts

the course and manner of treatment of patients, their satisfaction, and consequently their health condition. It is very important that health professionals (nurses/technicians and doctors of medicine) have experience in the field of communication and are able to patiently actively listen and observe the patient. Also, in order for the patient's treatment to be effective, it is necessary for the members of the health team to have good and positive communication with each other. Although communication is very important in health care, unfortunately, very little attention is paid to it and it is neglected, and the reasons for that can be heavy workload of health workers, lack of time and fatigue [23]. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) indicates that more than 60% of reported adverse events per patient are due to poor communication in the healthcare team [24]. In our study, the largest number of surveyed health workers (40%) stated that the main cause of conflicts among health workers was the problem in communication. In the cross-sectional study of Azoulay et al., 7 498 intensive care unit staff members were examined and the most common conflict-causing behavior were communication gaps, as well as personal animosity and mistrust [25]. In our study the results are similar where 38% of health workers blame the problems in organization as a source of conflict and 26% of respondents allege that personal problems are to blame for arise of conflict among health workers or between health workers and patients. The direction of the impact of the conflict on the outcome in the organization of the work of the health service depends on the styles and techniques of conflict resolution. The simplest way to resolve the conflict is for the parties in the conflict to have a serious conversation during which both sides will have the opportunity to say what they want and why they want something. Conversations of this kind are crucial and very often the simplest way to resolve conflict. The most important thing for resolving the conflict among health professionals is the existence of empathy, which should be specially developed and expressed by all health professionals (both nurses and doctors) [12]. The dominant style of conflict management of doctors and nurses/technicians in our research is the style of cooperation and compromise. The largest number of respondents (79%) chose cooperation and compromise as the way of resolving conflict, 14% avoided conflict, 4% chose reconciliation as the style of conflict resolution, while 3% of respondents chose bidding as the style of conflict resolution. Doctors of medicine significantly more often (84%) chose cooperation and compromise as the style of conflict resolution compared to nurses and technicians (74%), while nurses and technicians significantly more often (22%) chose conflict avoidance as the style of conflict resolution compared to doctors of medicine (6%) (p=0.048). Our results agree with the results of Sportsman et al. [24] in which compromise has been shown to be the most common style of conflict resolution for health professionals. It should be emphasized that we offered the respondents to choose one of these four styles that they most often choose for conflict resolution, but no one has the exclusive style of behavior in conflict situations. The style of behavior in the conflict depends on a number of factors such as the current situation, habits, life experience and previous relationship with that person. Healthcare professionals, in general, show a desire and tend to maintain good interpersonal relationships despite their needs and goals. Both doctors and nurses generally believe that conflict should be avoided in favor of a harmonious collective relationship and that people cannot resolve conflict without compromising interpersonal relationships [26]. However, the style chosen by the largest number of our respondents, which is compromise and cooperation, is considered to be one of the best styles for resolving conflicts in the healthcare team. People who use this style

view conflict as an opportunity to improve relationships and reduce tension. In the science of conflict, conflictology, one of the constant issues is the effectiveness of strategies, so from the aspect of the "ideal model", cooperation and compromise are considered the most effective style of conflict resolution, and one style is called cooperative strategy. Cooperative strategy is the style that contributes to several factors such as the interdependence of conflict participants and their tendency to work together in the future, the tendency of conflict participants not to rely on the use of aggression or force, focusing on solving the problem, not just protecting their own interests and achieving their goals [27]. In a study by Koeling et al. [28] nurses and doctors were examined on behaviors contributing to better communication. The results of this study suggest that doctors believe that nurses need to learn to convey more factual data, while nurses have focused on interpersonal relationships [24]. In situations where this style of cooperative strategy (cooperation and compromise) is rarely used, this indicates that differences in attitudes and opinions are not seen as the opportunity to learn something new [13].

Given the stressful working conditions, especially with the current epidemiological situation (pandemic of COVID-19 infection), we wanted to examine whether some factors such as depression, anxiety or stress affected the occurrence of conflict situations. Although in our study, anxiety was present in 32% of health care workers, stress in 51%, and depression in 2%, we did not observe a significant impact of those factors on the frequency of workplace conflicts. However, we found that nurses and technicians were significantly (p=0.012) more likely to had severe stress levels (20%), moderate stress levels (36%) and mild stress (10%) compared to doctors of medicine (8%; 8%; 8%). Also, our study showed that the mean score for anxiety was significantly higher (p=0.026) in the group of health professionals which had the conflict in their carriers when compared to the group of health professionals without the conflict. Also, respondents with a presence of conflict had significantly higher (p=0.008) values of stress when compared to the group without conflict in their carriers.

The style of adjustment in interpersonal relationships results in a large number of unresolved problems and the cessation of conflicts, which leads to employee dissatisfaction and a decline in the quality of work [26]. In our survey, 8% of respondents stated that they never adapted to the demands of colleagues, the largest number of respondents (81%) stated that they sometimes adapted, while 11% stated that they always adapted to the demands of colleagues when the conflict situation occurred. In our study, we found that nurses and technicians were highly statistically significantly more likely (16%) (p=0.006) to adapt to the requirements of colleagues compared to doctors of medicine (6%). Giving in or withdrawing is the style where a person gives up their goals and intentions and the struggle for interests is left to others. Healthcare professionals who use this style stay away from people who are in conflict as well as conflict situations. They feel helpless and believe it is hopeless to resolve the conflict. They believe it is much easier to withdraw both mentally and physically than to face conflict. Withdrawal style has been cited in the literature as the primary strategy used by nurses, especially in relation to doctors of medicine [26]. This result is confirmed by our results, which show that nurses and technicians significantly (χ 2=7,390; p=0.025) more often (20%) give in to their colleagues when conflicts arise compared to doctors of medicine (4%). In our study, nurses and technicians highly statistically significantly $(\chi 2=11,640; p=0.003)$ more often at the time of conflict retain their opinion for themselves (22%) compared to doctors of medicine (8%). A possible explanation for the more frequent use of styles of holding opinions for oneself,

adapting to the demands of colleagues, and giving in to colleagues among nurses could be their feeling of helplessness in relation to doctors of medicine [29].

Effective conflict resolution in the health care team must be a priority due to its negative impact on the quality of health care provided. Effective conflict management requires professional qualities and skills, as well as changing attitudes towards conflicts. It is therefore essential that health professionals understand the basics of conflict, its causes, and learn ways to resolve them [30]. From the beginning of their education, nurses and doctors should learn, through theoretical lectures and practical exercises, how to negotiate and analyze the different types of strategies used to resolve conflicts [31].

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Conclusion

Our research shows that 74% of health professionals experienced conflict in their workplace, doctors significantly more often than nurses. For 40% of respondents the main cause of the conflict with a patient or colleague is problem in communication. Also, the largest number of respondents (74%) chose cooperation and compromise as the way to resolve the conflict, doctors significantly more often than nurses. Nurses significantly more often chose conflict avoidance as their style of conflict resolution compared to doctors. Nurses and technicians more often kept their opinion to themselves during the conflict and more often adapted to the requirements of colleagues compared to doctors. The level of anxiety and stress is significantly higher in health professionals who experienced conflict at the workplace.

The research was conducted according to the Declaration of Helsinki.

Conflicts of interest. The authors declare no conflict of interest.

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Faktori povezani sa nastankom konflikta i stilovi rješavanja konflikta među zdravstvenim radnicima

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Uvod. Konflikt je proces tokom koga jedna osoba svjesno i namjerno čini napor u cilju sprečavanja napora druge osobe, nekim vidom blokade koji će dovesti do prekida u postizanju ciljeva i interesa druge osobe. Pojava konflikta u zdravstvenom timu je česta i može dovesti do pojave smanjene produktivnosti u radu zdravstvenih radnika, što se može negativno odraziti na njegu i liječenje pacijenata.

Metode. U ovoj studiji presjeka je učestvovalo 100 zdravstvenih radnika, medicinskih sestara i doktora medicine zaposlenih u primarnom, sekundarnom i tercijarnom nivou zdravstvene zaštite. Istraživanje je sprovedeno od marta do avgusta 2020. godine. Korišćen je upitnik o socio-demografskim karakteristikama ispitanika, upitnik o konfliktima zdravstvenih radnika, a standardizovana skala depresije, anksioznosti i stresa sa 21 pitanjem (DASS-21) je korišćena za mjerenje subjektivnog nivoa depresije, anksioznosti i stresa.

Rezultati. Sedamdeset četiri zdravstvena radnika (74%) su imali iskustvo konflikta na radnom mjestu, doktori (95%) značajno češće u odnosu na medicinske sestre (58%) (p=0,001). Četrdeset posto zdravstvenih radnika navodi da je problem u komunikaciji najčešći uzrok konflikta. Sedamdeset devet ispitanika (79%) bira saradnju i kompromis kao stil u rješavanju konflikta. Značajno češće doktori (84%) u odnosu na medicinske sestre (74%) biraju saradnju kao stil u rješavanju konflikta (p=0,048). Ispitanici koji su imali iskustvo konflikta imaju značajno više prosječne vrijednosti anksioznosti $(8,01\pm2,12)$ (p=0,026) i stresa (10,32±2,91) (p=0,008) u odnosu na ispitanike koji nisu imali iskustvo konflikta (6,13±1,91; 6,12±2,03).

Zaključak. Doktori su značajno češće imali konfliktne situacije na radnom mjestu. Doktori za rješavanje konflikta češće biraju stil saradnje i kompromisa u odnosu na medicinske sestre koje češće biraju stil izbjegavanja konflikta.

Ključne riječi: konflikt, rješavanje konflikta, zdravstveni radnici